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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,642	07/01/2004	Edward Edwardo Tapanes	13070.22	2876

22913 7590 08/23/2007  
WORKMAN NYDEGGER  
60 EAST SOUTH TEMPLE  
1000 EAGLE GATE TOWER  
SALT LAKE CITY, UT 84111

EXAMINER
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BEDTELYON, JOHN M

ART UNIT	PAPER NUMBER
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2874

MAIL DATE	DELIVERY MODE
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08/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/500,642

Applicant(s)

TAPANES, EDWARD EDUARDO

Examiner

John M. Bedtelyon

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/12/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the light being reflected from respective ends of the first and second waveguides and propagate back along the respective first and second waveguides into which the light was launched must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. The drawings are objected to because they are informal or hand drawn and are not suitable for publication. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. In claim 1, it appears as if the word "a" should have been inserted before "zig-zag".

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tapanes et al. (WO 00/37925, hereinafter Tapanes).

**With respect to claim 12, Tapanes teaches:**

A below ground perimeter security system (page 6, lines 8-12) including:

A first cable containing at least one first waveguide (10a, 10c);

A second cable containing at least one second waveguide (14, see figure 3);

The first and second cables being arranged below ground level and in spaced apart relationship relative to one another to define a barrier region which, should the region be traversed at ground level, will result in detection of the traversing of that barrier region (see figure 3);

Means for launching light (20) into the first and second waveguides (using couplers (24, 26a and 26b) so that light is able to circulate through the first and second waveguides in counter propagating manner (see figure 3 and page 23, line 8 – page 24, line 34) (or alternatively light is reflected from respective ends of the first and second waveguides and propagate back along the respective first and second waveguides into which the light was launched);

Means for receiving the light from the first and second waveguides so that the light can interfere (couplers (26a and 26b), the light will interfere with the disturbance in the optical fibers when there's an intrusion across the barrier region);

A detector (30a, 30b) for detecting the interfering light from the first and second waveguides to detect a change in a parameter of the light propagating through the first and second waveguides due to the traversing of the barrier region to provide and indication of an intrusion across the barrier region (page 23 line 8 – page 24, line 34).

**With respect to claim 13, Tapanes teaches:**

Wherein the first and second waveguides are coupled together by a coupler (60) so that the light circulates through the waveguides in counter propagating manner to enable not only the detection of intrusion, but also the location of the intrusion (page 23, line 8 – page 24, line 34).

**With respect to claim 14, Tapanes teaches:**

Wherein the first and second waveguides are each provided with a reflective end, and light is reflected from the reflective end back along the first and second waveguides (page 13, lines 29-33). The teaching of using a Michaelson interferometer would

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provide the two waveguides with a reflective end and would reflect light back along the first and second waveguides, by the definition and structure of a Michaelson interferometer.

***Allowable Subject Matter***

6. Claims 1-11 are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter: the prior art neither teaches or renders obvious the first and second waveguides being provided in separate cables and the separate cables being buried beneath ground level in a zig-zag spaced apart relationship wherein the first cable further comprises a further waveguide wherein light launched into the further waveguide is able to propagate through the further waveguide and then into the said first and said second waveguides.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Bedtelyon whose telephone number is 571-270-1290. The examiner can normally be reached on Monday - Friday, 10:00am - 6:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Bedtelyon/  
Patent Examiner, Art Unit 2874

  
KEVIN WOOD  
PRIMARY PATENT EXAMINER